

In the Claims

Claims 1 - 12 (Cancelled)

13. (New) A process for organizing a digital database in a traceable form comprising: modifying a main digital database by addition or deletion or modification of a recording of the main database, wherein modifying the main database comprises creating at least one digital recording comprising at least: unique digital identifiers of concerned recordings and attributes of the main database, a unique digital identifier of a state of the main database corresponding to the modification of the main database, elementary values of attributes assigned via elementary operations without proceeding to store non-modified attributes or recordings, and addition of the concerned recording in an internal historical database composed of at least one internal historical table, and

reading the main database, wherein reading relates to any final or previous state of the main database and comprises receiving or intercepting an original request associated with the unique identifier of a target state in proceeding to a transformation of an original request to construct a modified request for addressing the historical database comprising criteria of the original request and the identifier of the target state, and reconstruction of the recording or recordings corresponding to the criteria of the original request and to the target state, wherein the reconstruction comprises finding elementary values contained in the recordings of the historical database and corresponding to the criteria of the original request to reduce requirements of storage capacity and processing times.

14. (New) The process according to claim 13, wherein the recordings of the historical database also contain references to other recordings of the internal database to specify connections of dynamic dependence of source-destination type constituting a casual stream of interferences between data versions.

15. (New) The process according to claim 13, wherein modifying the main database is a logic operation and addition of the historical database comprises:

a recording identifying the state of the base corresponding to the logic operation,
as many recordings as parameters of the logic operation,
a recording for the possible result of the logic operation, and
specifying by cognateness regrouping of operations from the elementary level of modification to the level of the transaction, passing the number of semantic levels necessary for the applications.

16. (New) The process according to claim 13, wherein the main database comprises one or several tables organizing development links between the identifiers of successive and alternative states of the main database and intended to organize recordings of the internal database.

17. (New) The process according to claim 16, wherein the table or tables of the development links between the states of the main base contain(s) recordings specifying rules of correspondence between the recordings of the internal historical database and the states of the main database.

18. (New) The process according to claim 16 or 17, wherein reading comprises determining the state of the main database by referring to the identifiers and to the tables of development links between the states of the main base.

19. (New) An architecture for database management that employs the process according to claim 13, wherein an application querying the main database can specify the state of the desired main database.

20. (New) The architecture according to claim 19, wherein the application brings about modifications in the entire state of the main base and gives rise, in the instance of an attempt to modify a previous state, to creation of new alternatives of digital development of the main database, whose data is generated by the same internal historical database.

21. (New) The process according to claim 15, wherein the dependence links serve as recovery criteria for said operations already carried out.

22. (New) The process according to claim 15, wherein updatings carried out on various branches can be integrated or merged into the framework of a new state inheriting these branches.

23. (New) The process according to claim 15, wherein cases of the development of the structure of the data of the main database are treated as particular cases of the development of the data of the base, with the proviso that little of the structure/scheme of the main base is described in a manner cited for the data, as a dictionary.

24. (New) The process according to claim 15, wherein the historical database is explored and queried by applications via a native mode of a DBMS to obtain information and to navigate along versions and streams of dynamic dependence in accordance with the querying language in force required by the DBMS.